
OAR Box 1214

Prepped by Ollie Stewart

Document Number:

50) IV-D-16

Docket Number:

A-91-46

Petroleum Products Division

A-91-46
IV-D-16

Imperial Oil Limited
55 St. Clair Avenue West
Toronto, Ontario
Canada M5W 2J8

D.R. Purdie
Vice-President

T.R. Clapp
Director - Safety &
Environmental Affairs

Business Services

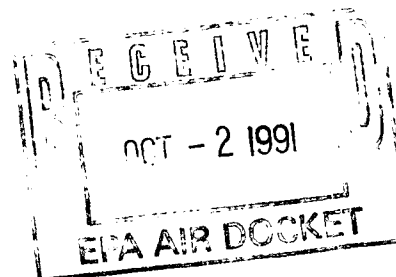
Imperial Oil

VIA COURIER

October 1, 1991

R & D - Hazardous Substances (MMT)
GOV - US EPA

Environmental Protection Agency
Public Docket A-91-46
Air Docket (LE-131)
401 M Street S.W., Room M-1500
Washington, D.C.
20460



Dear Madam or Sir

This letter is intended to provide the E.P.A. with information concerning our experience in Canada with the gasoline additive MMT. Imperial Oil Limited, through its downstream refining and marketing arm, is the largest gasoline refiner and retailer in Canada. With some minor exceptions, we have used MMT in our unleaded gasoline grades continuously since the late 1970's. The maximum allowable level of MMT in Canada is 18 mg/litre which is twice the limit which Ethyl Corporation has applied for in its U.S.A. waiver application. Imperial Oil's typical levels are in the 8-12 range, and would average about 10 mg of Mn per litre.

Imperial Oil Limited has no direct business incentive to either support or oppose the current Ethyl Corporation waiver application in the U.S.A. However, we recognize that the E.P.A. ruling will have a bearing on the future use of MMT in Canada. It is, therefore, important to us that this issue be decided as objectively as possible.

As we stated in a July 18th, 1990 letter to E.P.A. concerning Ethyl's 1990 waiver application, Imperial Oil has reviewed the published information on this subject, and is a "knowledgeable user". We have followed the technical and political arguments surrounding MMT, and have worked with several industry and government groups that have studied and reviewed MMT use in unleaded gasoline. These include a 1986 review by the Canadian General

.../2

Environmental Protection Agency

-2-

October 1, 1991

Standards Board and an independent scientific review by the Royal Society of Canada Commission on Lead in the Environment. The Royal Society concluded that MMT was a viable octane alternative, along with MTBE/ethers and ethanol/alcohols. Lead has been eliminated from Canadian gasolines, and MMT is permitted in all grades.

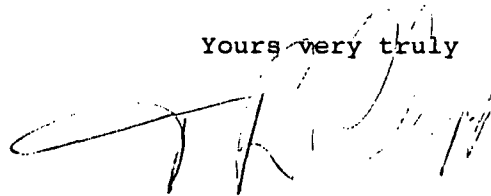
The CGSB study concluded that MMT use should continue to be allowed and recognized in the CGSB National Standard for gasoline but that its use should remain open to challenge with whatever new information that becomes available. This has proven to be a workable approach in Canada that we expect to continue for the foreseeable future.

MMT is added to our gasoline in the final blending stage. Although its use is not absolutely necessary in order to achieve desired octane levels, it is nonetheless, a cost-effective octane enhancing agent. Through its use, we are able to reduce overall crude oil consumption, and reduce the severity of refining processes used to make gasoline. In particular, the naphtha reforming process is less severe, which contributes to lower overall levels of aromatic constituents in gasoline. Without the use of MMT gasoline manufacturing costs, which are ultimately borne by the consumer, would rise, and other potentially adverse environmental impacts could occur.

Imperial Oil's Canadian experience with the use of MMT has been very positive. Our Canadian Field experience and technical service studies have led us to conclude that MMT does not foul spark plugs, poison oxygen sensors, plug catalyst beds or otherwise cause engine wear or damage.

Imperial Oil, with over ten years of Canadian experience, has found MMT to be a valuable and cost effective octane enhancer for all grades of gasoline. We believe it is suitable for use across the total automotive gasoline spectrum, and we believe that our customers have been well served by its use.

Yours very truly



T. R. Clapp

WRB:jt

LEPA.wrb

c.c.: M. T. Smith - U.S. Environmental Protection Agency
D. C. Wilson - Ethyl Canada
H. F. Wilkinson - Esso Petroleum Canada